A V E R M E D I A

AVerKey500 Pro

w/ Remote

User's Manual

AVerMedia®

Bridging PC/MAC & Video

FCC NOTICE

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial, industrial or business environment. This equipment can generate, use and radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION ON MODIFICATIONS

To comply with the limits for the Class B digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the Class B limits. All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception.

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

CE NOTICE

This is a Class B product.

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Chapter 1
Introduction

Thank you for purchasing the **AVerKey500 Pro**. We are certain you will find this product a useful video presentation tool that is highly suitable for your business and multimedia applications.

This chapter gives you an overview of what the **AVerKey500 Pro** can do. You will also find a list of the system requirements needed to use the product.

Features

- **Display Computer Images on TV**

  The **AVerKey500 Pro** can convert computer images into video format (Composite, S-video or SCART RGB) and display them on any TV monitor or large-screen LCD projector. It is compatible with all IBM PCs, Macintosh computers, NEC 98 PCs, and Laptops. **AVerKey500 Pro** can support any application under DOS, Windows 3.x, Windows 95, Windows 98, Windows NT, and Macintosh OS.

  The **AVerKey500 Pro** provides dual display on both your computer and TV monitors. (It supports all VGA monitors and MultiScan MAC monitors.)

- **True Plug-and-Play**

  The **AVerKey500 Pro** is kayaplug-and-play! No software drivers are required.

- **Supports Up to 1600 x 1200**

  With Super-VGA compatibility, your applications can be converted up to 1600 X 1200 (PC), 1024 X 768 (Macintosh) !

- **Remote Mouse and Remote Control in One**

  The remote control unit allows you to give your presentation from up to 7 meters (23 feet) away. With the built-in remote mouse, you can roam around the classroom or conference room freely and still be able to control your presentation.

- **Touch-Button Panel Control**

  Just in case the remote control is lost, you can still operate the **AVerKey500 Pro** through the Touch Button Panel Control. All major control functions are available through touch button on the hardware case.

- **Page Saver**

  While giving presentations to an audience, you may need to return to a certain page and emphasize again some important ideas. **AVerKey500**'s *Page Saver* function allows you to save any page from your presentation. Just press a button to access and display the last page you saved.

- **Easily Highlight Key Points in Your Presentation**

  By simply using the remote, you can highlight important points in your presentation. Choose from 3 types of presentation highlight functions :

  - AVerMedia® POINTER

  Similar to a Laser Pointer, *AVerMedia Pointer* lets you direct your viewers attention to key areas on the screen. Choose from an array of vibrant colors.

  - AVerMedia® SPYLIGHT

  Highlight part of your presentation and darken the rest of the screen. You can darken areas horizontally or vertically.

  - AVerMedia® SPOT

  Create a colored border around your area of interest. You can make a highlight as large as 1/4th or as small as 1/64th of your presentation screen.

- **Zoom into Any Area on the Presentation Screen**

  Enlarge any area of your presentation screen through one of these special zoom functions : (You can adjust picture sharpness while you are in any of the zoom modes.)

- Traditional Zoom and Pan

Users can zoom in (200%) the computer screen on TV and pan around freely to any part of the screen.

- Area Zoom

This function cuts the screen into 9 parts and allows you to select the desired part through the available buttons on the remote control.

- AVerMedia® POINTER Zoom

You can point to a key area in your presentation using *AVerMedia Pointer* and then enlarge that area. (AVerKey500 Pro only supports this function for VGA resolutions up to 1024 x 768)

- AVerMedia® SPOT Zoom

Once you have highlighted a certain area using *AVerMedia Spot*, you can zoom in and out of the highlighted area. (AVerKey500 Pro only supports this function for VGA resolutions up to 1024 x 768)

- **Up to 7 Sharpness Selections**

The **AVerKey500 Pro** gives you up to 7 flicker-filter selections which provide 100% flicker-free TV display.

- **Video Switcher**

Connect the **AVerKey500 Pro** with a computer and a video source such as a LaserDisc player or VCR. Select either source to be your final TV output.

- **Linear Adjustment, Vertical and Horizontal Scale**

Adjust both the screen width and height! This is one very special feature not found in most video converters. A wide selection of sizes are available.

- **Full Screen Underscan/Overscan**

Full Screen Underscan/Overscan prevents your images from being "chopped out". (Note: Images will not be chopped off for resolutions up to 1600 x 1200.)

- **Screen Freeze/Unfreeze**

Screen Freeze lets you pause the TV display and make changes to your presentation without your audience knowing it. You can also prolong the time of display when you are giving demos.

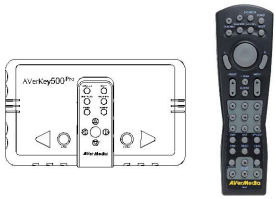
- **Auto Power On**

AVerKey500 Pro powers on automatically after you have connected the proper cables to your TV, PC & AVerKey500 Pro.

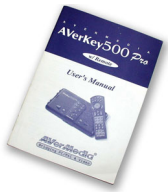
AND MORE!

What's in the Package

Your **AVerKey500 Pro** package includes the following :



AVerKey500 Pro Scan Converter and Remote Control (batteries included)

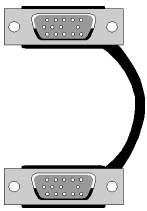


This User's Manual

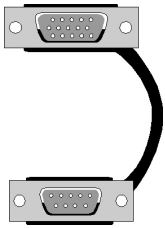
AC Power Adapter Unit

S-Video Cable

AV Cable



Computer Extension Cable (for IBM PC and compatibles)

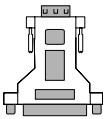


2 RS-232 Cables (for IBM PC and compatibles)

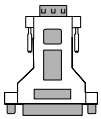
2 ADB Cables (for Macintosh)

2 PS2 Cables (for IBM PC and compatibles)

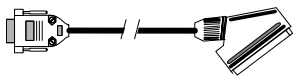
Optional Accessories :



Monitor Adapter (for MAC/NEC)



Computer Adapter (for MAC/NEC)



SCART Cable (optional on PAL version)

What You Can Do with the AVerKey500 Pro

- Business Conference Room Presentation
- Classroom Presentation
- Trade Show Presentation
- Software Training Tape Recording
- Advertisement
- Multimedia and Video Production

And more!!

System Requirements

To use the **AVerKey500 Pro**, you will need :

- IBM® PC or compatibles;
- Any Macintosh supporting standard display modes :
  512 x 384 at 24KHz ; 640 x 480 at 31KHz or 35KHz ;
  832 x 624 at 48KHz ; up to 1024 x 768 at 60KHz
  (MAC systems without the monitor output require a Power-R or Apple® adapter); or
- Any NEC computer from the NEC 98 Series

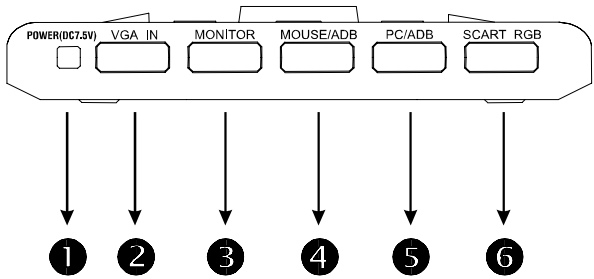
NOTE: **AVerKey500 Pro** should in theory support any computer and display systems with a vertical display frequency range of 50Hz to 100Hz and a horizontal display frequency of 24KHz to 95KHz. However, due to different custom hardware configurations and the wide variety of connectors used on various systems, we cannot guarantee that **AVerKey500 Pro** will function properly.

Chapter 2
Hardware Installation and Setup

This chapter will show you how to install the **AVerKey500 Pro** to an IBM compatible PC, Macintosh computer and NEC 98 PC.

The Back Panel

The ports on the back panel of the **AVerKey500 Pro** are for connecting the converter to the computer and graphics display monitor. The figure and descriptions below specify what device should go into each port.



✚ **POWER** : Plug the *AC Power Adapter* to this port.

✚ **VGA IN** : ***For IBM PC or compatible :***
This port connects the **AVerKey500 Pro** to the IBM compatible PC's VGA port via the supplied *Computer Extension Cable*.

For Macintosh :
This port connects the **AVerKey500 Pro** to the Macintosh PC's display card via the *Computer Adapter* and *Computer Extension Cable*. (The *Computer Adapter* is provided as an optional accessory.)

✚ **MONITOR** : Connect the VGA or Macintosh display monitor to this port. A *Monitor Adapter* is needed to connect the Macintosh display monitor. (The *Monitor Adapter* is provided as an optional accessory.)

✕ **MOUSE/ADB** : ***For IBM PC or compatible :***
If you need to use your wired mouse, connect the mouse to this port.
Use the supplied *RS-232 Cable* to connect a Microsoft compatible mouse to this port.

For Macintosh :
Connect the ADB devices (e.g. keyboard, mouse, etc.) from your Macintosh computer to this port.

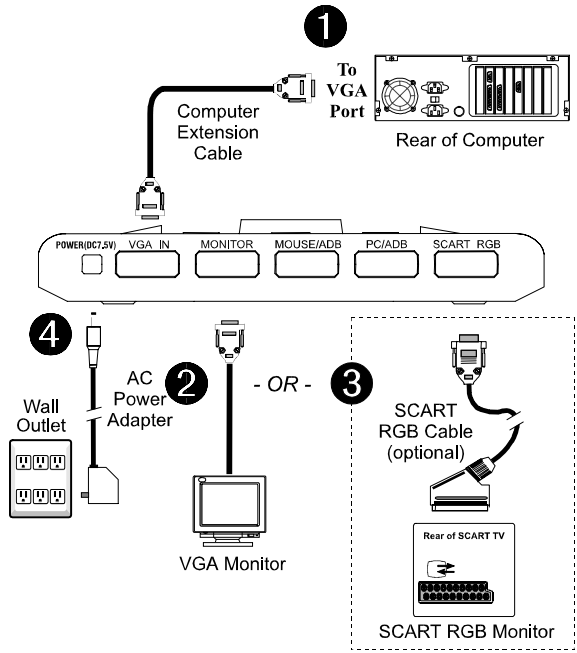
✕ **PC/ADB** : ***For IBM PC or compatible :***
Connect the supplied *RS-232 Cable* between this port and the serial port on your PC if you connected a Microsoft compatible mouse to the **AVerKey500 Pro**.

For Mac :
Connect the supplied *ADB Cable* between this port and the Macintosh computer's ADB port.

✕ **SCART RGB** : If you want to use a SCART RGB monitor with your PC and the **AVerKey500 Pro**, connect it to this port using the *SCART RGB Cable*.
(***Note :*** The SCART RGB Cable is an optional accessory cable supplied with the **AVerKey500 Pro**.)

Installing AVerKey500 Pro to an IBM PC

Follow the setup diagram and procedure below to install the **AVerKey500 Pro** to an IBM compatible PC.



✚ Connect the **AVerKey500 Pro** to the PC. Plug one end of the supplied *Computer Extension Cable* to the **AVerKey500 Pro** "VGA IN" port and the other end to the PC's VGA port.

✚ Connect the VGA monitor to **AVerKey500 Pro**. Plug the VGA monitor cable to the **AVerKey500 Pro** "**MONITOR**" port.

✚ If you are using a SCART RGB monitor, connect it to the **AVerKey500 Pro** "**SCART RGB**" port by using the *SCART RGB Cable*.

(Note : The SCART RGB cable is an optional accessory cable supplied with the **AVerKey500 Pro**.)

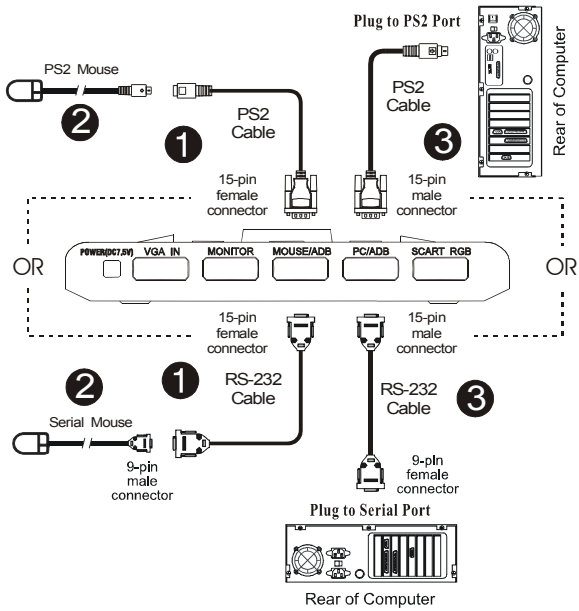
× Plug the supplied *AC Power Adapter* into the **AVerKey500 Pro** "**POWER**" port.

Connecting a Wired Mouse

The **AVerKey500 Pro** remote control already provides a remote mouse which allows you to control your presentations.

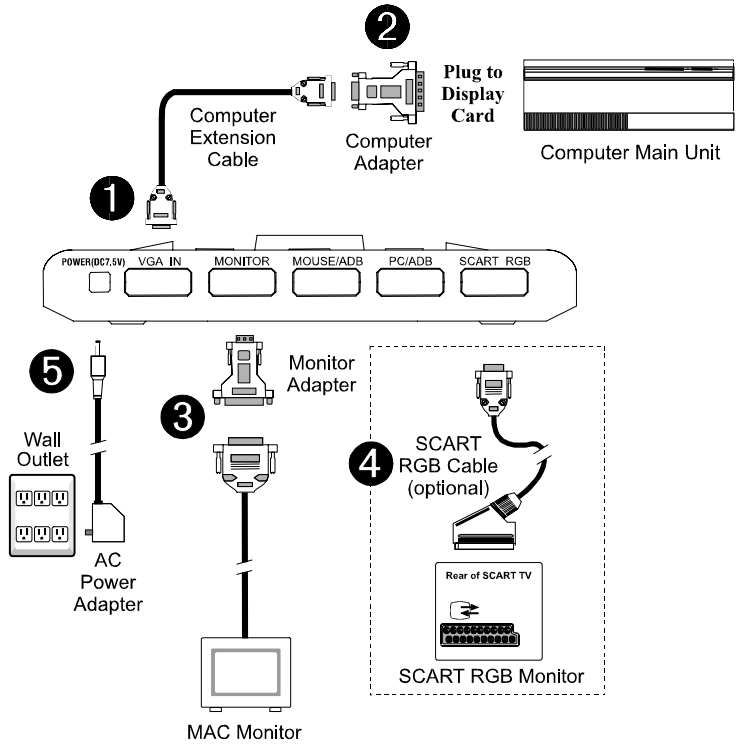
If you still need to use a wired mouse, make sure it is Microsoft compatible. If you have an IBM PC mouse or another mouse type, check if it can be switched to Microsoft mouse mode.

Follow the diagram and instructions below to connect a wired mouse to the **AVerKey500 Pro**.



- Plug the supplied *RS-232 or PS2 Cable* to the **AVerKey500 Pro** "**MOUSE/ADB**" port.
- Disconnect your wired mouse from the PC and plug the mouse to the other end of the *RS-232 or PS2 Cable*.
- Connect the other *RS-232 or PS2 Cable* to the **AVerKey500 Pro** "**PC/ADB**" port and the PC's serial or PS2 port.

Installing AVerKey500 Pro to a Macintosh or PowerPC



✚ Connect the supplied *Computer Extension Cable* to the **AVerKey500 Pro** "**VGA IN**" port.

✚ Attach the *Computer Adapter* to the other end of the *Computer Extension Cable*. Then, plug the *Computer Adapter* along with the attached *Computer Extension Cable* to the monitor port on the back panel of your Macintosh PC.

(Note : The *Computer Adapter* is provided as an optional accessory.)

✚ Attach the *Monitor Adapter* to your Macintosh monitor. Then, plug the *Monitor Adapter* with the attached monitor cable to the **AVerKey500 Pro** "**MONITOR**" port.

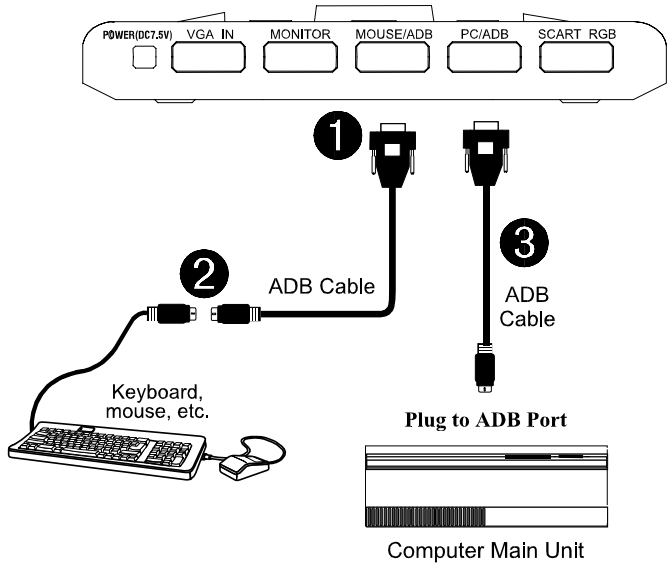
(Note : The *Monitor Adapter* is provided as an optional accessory.)

× If you are using a SCART RGB monitor, connect it to the **AVerKey500 Pro** "**SCART RGB**" port by using a *SCART RGB Cable*.

(Note : The *SCART RGB Cable* is an optional accessory cable supplied with the **AVerKey500 Pro**.)

× Plug the supplied *AC Power Adapter* into the **AVerKey500 Pro** "**POWER**" port.

Connecting a Wired Mouse



✚ Connect the supplied *ADB Cable* to the **AVerKey500 Pro** "**MOUSE/ADB**" port.

✚ Disconnect the keyboard and other attached accessories from your Macintosh computer's ADB port and connect them to the other end of the *ADB Cable*.

✚ Connect the second *ADB Cable* to the **AVerKey500 Pro** "**PC/ADB**" port and your Macintosh computer's ADB port.

Connecting a TV Monitor and Video Source

Use the connectors at the side panel of the **AVerKey500 Pro** to connect a TV monitor (or any video monitor). If you have a video source such as a VCR, laserdisc player or video camera originally connected to your TV monitor, you can also connect the video source to the **AVerKey500 Pro**.

To output your computer presentation to a TV monitor :

- ✚ **S-OUT** : If you have a TV monitor that uses the S-video standard, connect the supplied *S-Video Cable* to the **AVerKey500 Pro** "**S-OUT**" port and the TV monitor's "S-IN" port.
- ✚ **VIDEO-OUT** : If you have a TV monitor that uses the Composite video standard, connect the supplied *AV Cable* to the **AVerKey500 Pro** "**VIDEO-OUT**" port and the TV monitor's "VIDEO-IN" port.

Refer also to the setup diagram on the next page for the proper cable connections.

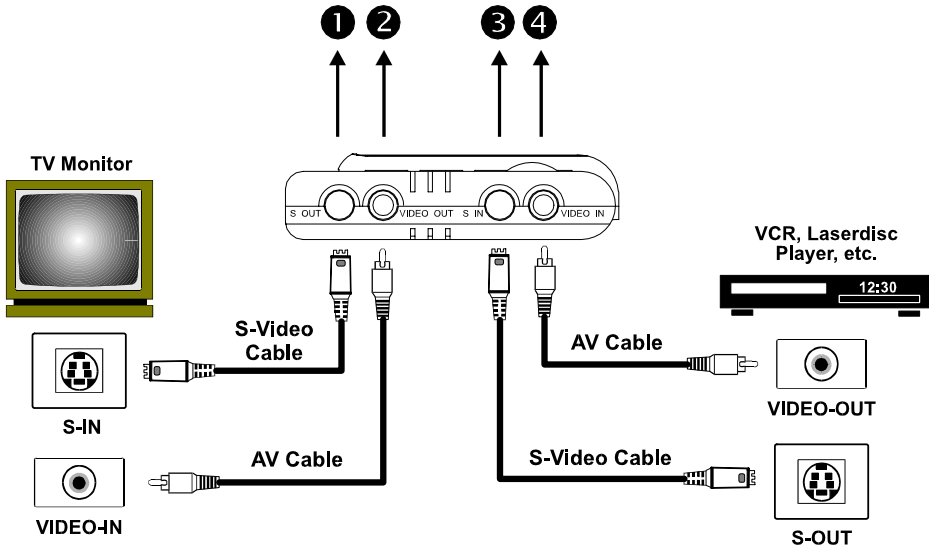
To use the AVerKey500 Pro as a Video Switcher :

The **AVerKey500 Pro** allows you to connect a computer and a video device such as the VCR or LaserDisc Player. You can then use the **AVerKey500 Pro** as a Video Switcher to select either source to be the final output. Environments such as classrooms and conference rooms usually require a TV to be connected to a VCR at all times. Now with the **AVerKey500 Pro**, you do not need to disconnect cables whenever you need to use the TV with either the computer or the VCR/LaserDisc.

To connect the **AVerKey500 Pro** to a VCR or any video source :

- ✚ **S-IN** : If the VCR (or any video source) is originally attached to your TV monitor and it uses the S-video standard, use an *S-Video Cable* to connect the VCR to the **AVerKey500 Pro** "**S-IN**" port and the TV monitor's "S-OUT" port.
- ✕ **VIDEO-IN** : If a VCR (or any video source) is originally attached to the TV monitor and it uses the Composite video standard, use an *AV Cable* to connect the VCR to the **AVerKey500 Pro** "**VIDEO-IN**" port and the TV monitor's "VIDEO-OUT" port.

Refer also to the setup diagram on the next page.


1 2 3 4
TV Monitor
S OUT
VIDEO OUT
S IN
VIDEO IN
VCR, Laserdisc Player, etc.
12:30
S-Video Cable
AV Cable
S-IN
VIDEO-OUT
AV Cable
S-Video Cable
VIDEO-IN
S-OUT

Chapter 3
Using the AVerKey500 Pro

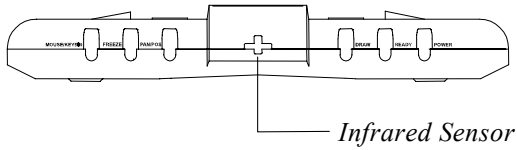
This chapter will show you how to use the *Remote Control Unit* and *Touch Button Control Panel* of the **AVerKey500 Pro**. Here, you will also learn how to operate the remote mouse, highlight important points in your presentation, and use the various zoom functions of **AVerKey500 Pro**.

The Remote Control Unit

The **AVerKey500 Pro** Remote lets you control your presentation from over 7 meters (23 feet) away.

To use the remote control, first insert the supplied batteries (2 size "AAA" batteries) into the battery compartment at the back of the remote.

While using the remote, aim it at the *Infrared Sensor*. The infrared sensor is located at the front panel of the **AVerKey500 Pro**.



AVerMedia AVerKey500 Pro Front Panel

The descriptions on the next page briefly explain what the remote control buttons are used for.

Continue reading the rest of this chapter for more information on using the remote control.

POWER : Switches the **AVerKey500 Pro** on/off.

RESET : Restores the **AVerKey500 Pro** to original factory settings.

SHARPNESS : Press the **+** button to increase the sharpness level.

Press the **-** button to decrease the sharpness level.

BRIGHTNESS : Press the **+** button to increase the brightness level.

Press the **-** button to decrease the brightness level.

OVERSCAN : Toggles between *Underscan* and *Overscan*.

Overscan displays the computer image on TV to the fullest. The image will be chopped off at the borders when displayed this way.

When you switch to ***Underscan***, the computer image will be completely displayed on TV.

NOTE : Images will not be chopped off for resolutions up to 1600 x 1200 in underscan mode.

MOUSE/KEY : Toggles between the ***Remote Mouse*** and ***AVerKey500 Pro*** modes.

L (Left Mouse Button) : Works the same as the left mouse button of a wired mouse. To drag-and-drop, you must use this button with the **L.DRAW** or **R.DRAW** button. Refer to the section, *The Remote Mouse*, for more details.

R (Right Mouse Button) : Works the same as the right mouse button of a wired mouse. To drag-and-drop, you must use this button with the **L.DRAW** or **R.DRAW** button. Refer to the section, *The Remote Mouse*, for more details.

MOUSE CONTROL : The big round button on the remote is the **MOUSE CONTROL** button.

Mouse Control Button

In Remote Mouse mode:

Use this button to move the mouse cursor or a selected object (e.g. icon or window).

In AVerKey500 Pro mode:

Use this button to :

- Pan (move) around the computer image on TV.
- Move the AVerMedia Pointer (or line) around the TV screen.
- Highlight other areas of your presentation.

L.DRAW : Use **L.DRAW** with the **MOUSE CONTROL** button to drag an object, e.g. an icon or window. (This is just the same as dragging an object using the left mouse button of a wired mouse.) You can also use these two buttons to select a group of objects. Refer to the section, *The Remote Mouse*, for more information.

R.DRAW : Use **R.DRAW** with the **MOUSE CONTROL** button to drag an object, e.g. an icon or window. A menu with selectable options will then appear. (This is just the same as dragging an object using the right mouse button of a wired mouse.) Refer to the section, *The Remote Mouse*, for more information.

HEIGHT : Press ⑩ to enlarge the height of the computer image on TV.

Press ⓪ to reduce the height of the computer image on TV.

WIDTH : Press ☜ to enlarge the width of the computer image on TV.

Press ◀ to reduce the width of the computer image on TV.

AREA ZOOM : Provides quick selection of the screen area to magnify.

The *Area Zoom* function divides the computer image on the TV into 9 parts and allows you to select the desired part to zoom. Refer to the section, *Different Types of Zoom*, for more details.

POINT (AVerMedia Pointer) : This button functions just like a laser pointer.

SPOT (AVerMedia Spot) : Press this button to highlight a certain area in your presentation. The highlighted area will be surrounded by a colored frame and areas outside the frame will look dark.

SPYLIGHT (AVerMedia Spylight) : Press this button to highlight a part of your presentation and darken the rest of the screen.

*(Please refer to the section, Presentation Highlight Functions, for more details on using the **POINT**, **SPOT** and **SPYLIGHT** buttons.)*

ZOOM : Press this button to zoom in or out of the :

- Computer image on TV
- An area on the presentation screen which you highlighted using the **SPOT** button (*AVerMedia Spot-Zoom*)
- A key point on the presentation which you highlighted using the **POINT** button (*AVerMedia Pointer-Zoom*)

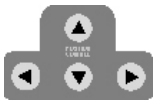
FREEZE : Freeze/Unfreeze the computer image on TV.

COLOR : You can use this button to change the color of the *AVerMedia Pointer*. You can also change the color of the frame which surrounds a highlighted area (*AVerMedia Spot*). There are 8 available colors to choose from. Refer to the section, *Presentation Highlight Functions*, for more details.

SAVE PAGE : Press this button to save the current page shown on the TV screen.

RECALL PAGE : Press this button to access the last page you saved with the **SAVE PAGE** button.

POSITION CONTROL : Use these buttons to move the computer image on TV. You can move the image up, down, left, or right.



Selecting Your Computer or a Video Source as the TV Output (Video Switcher Function)

AVerKey500 Pro's ***Video Switcher Function*** allows you to select your computer or a video source as the final output on TV. (Refer to the section, *Connecting a TV Monitor and Video Source*, in *Chapter 2* for details on how to connect a video source to the **AVerKey500 Pro**.)

If you want your computer to be the output on TV, simply power on the **AVerKey500 Pro** unit.

If you have a video source like a VCR, LaserDisc Player or Camcorder connected to the **AVerKey500 Pro** and you want the video source to be the output on TV, power off the **AVerKey500 Pro** unit.

When the **AVerKey500 Pro** is switched off, all your settings will also be saved automatically.

Changing the Operating Mode of the Remote

The Remote Control operates in two types of modes: ***Remote Mouse*** mode and ***AVerKey500 Pro*** mode. Use the **MOUSE/KEY** button to toggle between these two modes.

- ***Remote Mouse Mode***
  Check and see if the **MOUSE/KEY500** LED on the **AVerKey500 Pro** front panel is ON. If it's not, press the **MOUSE/KEY** button to switch to ***Remote Mouse Mode***.

Refer to *The Remote Mouse* section below for information on how to use the remote mouse.

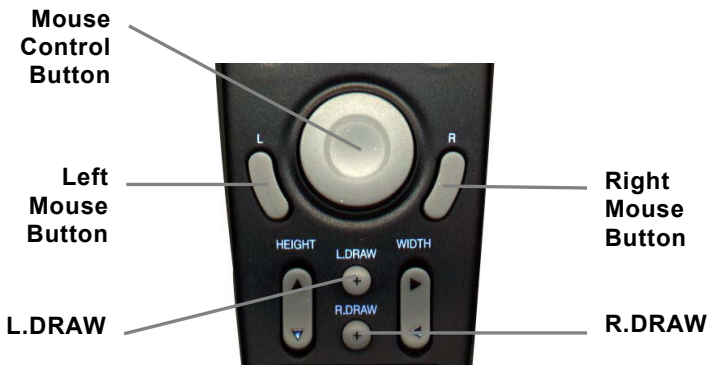
- ***AVerKey500 Pro Mode***
  Check and see if the **MOUSE/KEY500** LED on the **AVerKey500 Pro** front panel is OFF. If it's not, press the **MOUSE/KEY** button to switch to ***AVerKey500 Pro Mode***.

The Remote Mouse

AVerKey500 Pro's remote control has a built-in ***Remote Mouse***. The Remote Mouse functions just like your ordinary mouse, except now, you can stand 7 meters (23 feet) away from your computer and simply use your fingers to scroll, point and click on your applications.

To use the remote mouse, you must set the remote control to operate in ***Remote Mouse Mode***.

Remote Mouse Buttons



The table on the next page provides detailed, step-by-step procedures on how to use the remote mouse on a Windows environment.

HOW TO	Procedure
How to move the mouse pointer/cursor	Hold down the **Mouse Cursor Button** and move the mouse pointer/cursor in any direction you want.
How to select an icon or window on the Windows desktop; How to "double-click"	1. Position the mouse pointer on top of the icon or window you want. (Use the **Mouse Cursor Button**.) 2. Press the **L (Left Mouse) Button**.
How to select an option from a shortcut menu	1. Press the **R (Right Mouse) Button** to open the shortcut menu. 2. Hold down the **Mouse Cursor Button** and move the mouse pointer to your desired option. 3. Press the **L (Left Mouse) Button**.
How to select icons that are next to each other	1. Place the mouse pointer at the proper position. (Use the **Mouse Cursor Button**.) 2. Press the **L.DRAW Button**. 3. Hold down the **Mouse Cursor Button** and drag a rectangle around the icons you want to select.
How to select text in a Windows application	1. Place the mouse cursor at the start of the text you want to select. (Use the **Mouse Cursor Button**.) 2. Press the **L (Left Mouse) Button**. 3. Then, press the **L.DRAW Button**. 4. Hold down the **Mouse Cursor Button** and drag over the text you want to select. 5. When you reach the end of the text you want to select, press the **L.DRAW Button**.
How to drag and drop	Use the **L.DRAW** or **R.DRAW** button. **If you use the L.DRAW button :** 1. After selecting an icon, window, group of icons, or an amount of text, press the **L.DRAW** button. 2. Hold down the **Mouse Cursor Button** and drag the icon(s), window or text to your desired destination. 3. Press the **L.DRAW** button again to drop the icon(s), window or text.

	If you use the R.DRAW button : 1. After selecting an icon, window, group of icons, or an amount of text, press the **R.DRAW** button. 2. Hold down the **Mouse Cursor Button** and drag the icon(s), window or text to your desired destination. 3. A menu with available options will then appear. Select your desired option. 4. Press the **R.DRAW** button again to drop the icon(s), window or text.

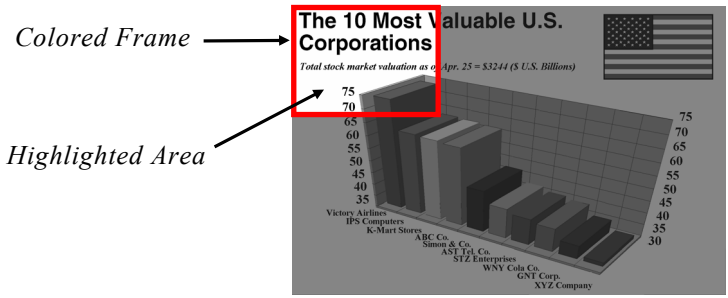
Presentation Highlight Functions

The **AVerKey500 Pro** provides 3 special functions for highlighting key points in any presentation : ***AVerMedia Spot***, ***AVerMedia Pointer*** and ***AVerMedia Spylight***. You can use these functions by pressing the corresponding buttons on the remote control.

AVerMedia Spot

To highlight a certain area in your presentation, press the **SPOT** button on the remote.

A colored frame will appear around the highlighted area and the rest of the image will be darkened. The highlighted area will appear as if there is a "light" directed on it. The figure below shows an illustration.



Changing the Color of the Frame

Use the **COLOR** button to select a color for the frame. Press this button repeatedly and select your desired color. There are 8 available colors to choose from.

Changing the Size of the Highlight

Use the **WIDTH** and **HEIGHT** buttons to change the scope of the highlighted area. You can create a highlight as large as 1/4th of your screen or as small as 1/64th of your presentation screen.

Higlighting Another Area

Use the **MOUSE CURSOR Button** to highlight another area in your presentation.

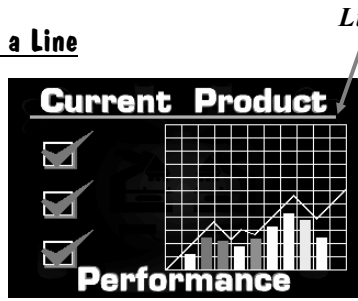
AVerMedia Pointer

AVerMedia Pointer is very similar to the laser pointer. It is a 4 x 4 pixel square which lets you direct your viewer's attention to key areas in your presentation.

To point on a key area in your presentation, press the **POINTER** button on the remote.

Extending the AVerMedia Pointer into a Line

If you have a very large audience, the ***AVerMedia Pointer*** on the presentation screen might not look obvious and clear enough. You can extend the ***AVerMedia Pointer*** into a ***Line***.



Use the **WIDTH** button to extend the ***AVerMedia Pointer*** into a line or vice versa. At most, you can stretch the line up to the full extent of your screen width.

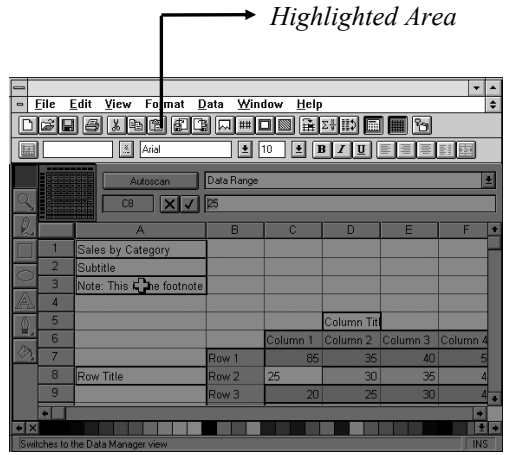
Moving the AVerMedia Pointer (or Line)

Use the **MOUSE CURSOR Button** to move the ***AVerMedia Pointer*** (or line) up, down, left or right.

Changing the Color

Press the **COLOR** button repeatedly and choose your desired color for the ***AVerMedia Pointer*** (or line). There are 8 available colors to choose from.

AVerMedia Spylight



The ***AVerMedia Spylight*** function works somewhat the same as your regular overhead projector. With this function, you can highlight a part of your presentation and then "cover" the rest by darkening areas which you do not want to show to your audience.

When you press the **SPYLIGHT** button for the first time, the upper part of your presentation screen will be highlighted. (See the sample screen above.)

Highlighting Areas Horizontally and Vertically

Use the **MOUSE CURSOR Button** to show or darken more parts of your presentation screen.

Different Types of Zoom

The **AVerKey500 Pro** provides 4 types of zoom : ***Normal Zoom, AVerMedia Area Zoom, AVerMedia Spot-Zoom***, and ***AVerMedia Pointer-Zoom***.

(AVerKey500 Pro only supports AVerMedia Spot-Zoom & AVerMedia Pointer-Zoom functions for VGA resolutions up to 1024 x 768)

Normal Zoom

Normal Zoom allows you to zoom in and out of the computer image on TV. When you press the **ZOOM** button for the first time, the upper left side of your computer image will be enlarged and displayed on TV.

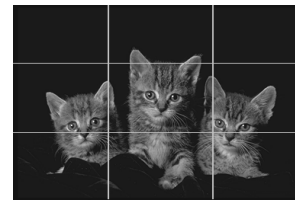
Once you have used other AVerMedia zoom functions (e.g. AVerMedia Area Zoom, Pointer-Zoom, etc.), you can press the **ZOOM** button to re-display the last zoomed image.

AVerMedia Area Zoom

This function divides your screen into 9 parts and allows you to select the desired part to zoom through the available buttons on the remote control.

The directional buttons on the remote corresponds to 9 parts of your screen :

Directional Buttons on the Remote Control



9 Parts of the Screen

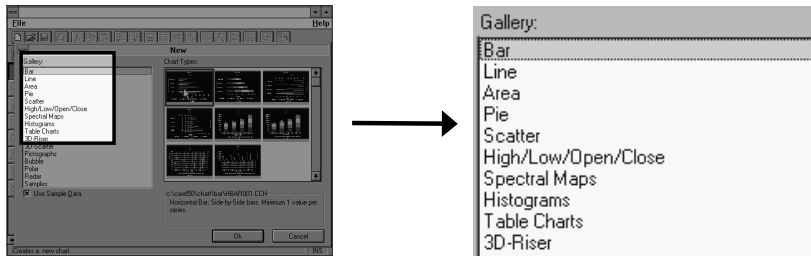
Press one of the 9 directional buttons which corresponds to the part of the screen you want to zoom.

For example :

AVerMedia Spot-Zoom

As described earlier in the section, *AVerMedia Spot*, under *Presentation Highlight Functions*, you can highlight a certain area in your presentation by pressing the **SPOT** button.

After pressing the **SPOT** button, press **ZOOM** to enlarge the highlighted area inside the colored frame. (The figure below shows an illustration.)



*Press the **SPOT** button to highlight an area.*

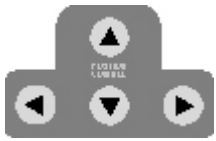
*Then, press the **ZOOM** button to enlarge the highlighted area.*

AVerMedia Pointer-Zoom

After you press the **POINTER** button to point on a key area in your presentation screen, press the **ZOOM** button to magnify the area where you are pointing to.

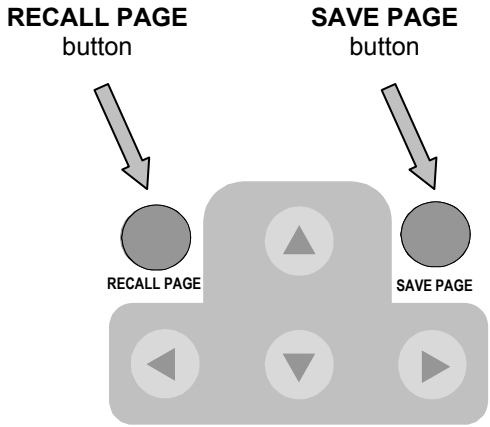
Panning and Positioning

You can pan (move) to other parts of the zoomed image by using the **MOUSE CURSOR** button.



To shift the position of the zoomed image, use the **POSITION CONTROL** buttons of the remote control.

Page Saver



AVerKey500's *Page Saver* feature allows you to store any page from your presentation and easily call out that page.

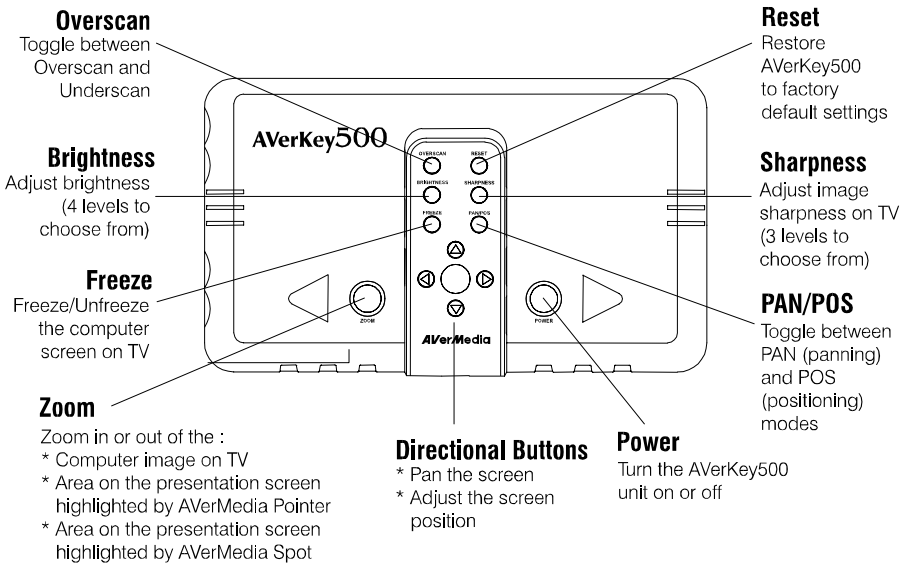
Press the **SAVE PAGE** button on the remote to save the current page on your presentation screen.

To access and display the last page you saved, press **RECALL PAGE**.

Touch-Button Panel Control

The Touch-Button Panel Control on the **AVerKey500 Pro** unit gives you access to the most commonly used functions.

Some of the touch buttons work differently than the remote control buttons. These include **Brightness**, **Sharpness**, **PAN/POS**, and the **Directional Buttons**. Refer to the figure and descriptions below for the details.


Overscan
Toggle between Overscan and Underscan
Reset
Restore AVerKey500 to factory default settings
AVerKey500
Brightness
Adjust brightness (4 levels to choose from)
Sharpness
Adjust image sharpness on TV (3 levels to choose from)
Freeze
Freeze/Unfreeze the computer screen on TV
PAN/POS
Toggle between PAN (panning) and POS (positioning) modes
Zoom
Zoom in or out of the :
* Computer image on TV
* Area on the presentation screen highlighted by AVerMedia Pointer
* Area on the presentation screen highlighted by AVerMedia Spot
Directional Buttons
* Pan the screen
* Adjust the screen position
Power
Turn the AVerKey500 unit on or off
AVerMedia

The PAN/POS Button

The **PAN/POS** touch button toggles between the **PAN** (***Panning***) and **POS** (***Positioning***) modes.

Panning to Other Parts of the Zoomed Image

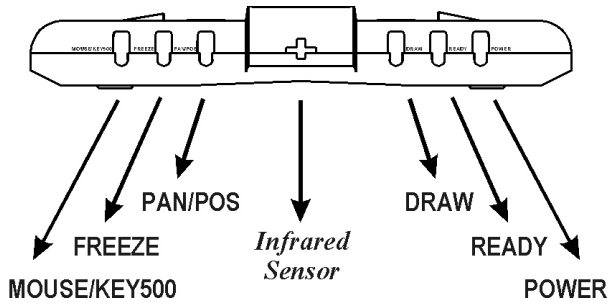
1. Check and see if the **PAN/POS** LED on the **AVerKey500 Pro** front panel is OFF. If it's not, press the **PAN/POS** button to switch to **PAN** mode.
2. Press on the **Directional Buttons** to view other parts of the zoomed image.

Adjusting the Image Position

1. Check and see if the **PAN/POS** LED on the **AVerKey500 Pro** front panel is ON. If it's not, press the **PAN/POS** button to switch to **POS** mode.
2. Press on the **Directional Buttons** to move the image up, down, left, or right.

The LED Panel

At the front panel of the **AVerKey500 Pro**, you will find the ***Infrared Sensor*** and several ***LEDs***. Each LED shows you whether or not a particular function or operating mode is active. The figure and descriptions below explain what each LED represents.



MOUSE/KEY500 : This LED shows which type of mode the remote control is currently in.

If the LED light is off, it means that the remote is operating in ***AVerKey500 Pro mode***.

If the LED light is on, it means that the remote is operating in ***Remote Mouse mode***.

FREEZE : This LED shows whether FREEZE or UNFREEZE is in operation.

If this LED light is on, it means that the user has paused, i.e, frozen the screen.

PAN/POS : This LED works in conjunction with the **PAN/POS** button of the Touch-Button Control Panel.

If the LED is OFF, it means that the panning function is active.

If the LED is ON, it means that the positioning function is active.

Infrared Sensor : The infrared sensor (at the middle of the front panel) receives incoming commands from the remote control.

DRAW : This LED works in conjunction with the **L.DRAW** and **R.DRAW** buttons of the Remote Control. It lights up when you are selecting objects or performing a drag-and-drop.

READY : If this LED light is on, it indicates that the **AVerKey500 Pro** is ready for use.

POWER : This red LED is the power ON/OFF indicator. If this LED is on, it indicates that the **AVerKey500 Pro** has been powered ON.

Chapter 4
Troubleshooting

This chapter provides many useful tips on how to solve common problems while using the **AVerKey500 Pro**.

There is no picture on my TV.

---

1. Check all the connectors again as shown in this manual.
2. Check your TV remote control on/off switch and channel setting.
3. Verify the setting of Composite Input or S-VHS Input of your TV set.
4. If you are using a SCART connector, check the SCART input of your TV set.
5. If you are using a notebook, you may have to switch to external VGA mode. (Refer to your notebook's manual.)
6. As specified by IBM, some systems may require that the monitor is present and connected when the system is powered up.

The picture on my TV is distorted.

---

1. Before doing any adjustments, reset all the picture attributes to the factory default setting using the **RESET** button on the remote control.
2. Each VIDEO display device is slightly different from another. Use the Panning Control of **AVerKey500 Pro** to adjust the picture.
3. Use the Brightness and Sharpness picture attributes controls on the remote control to reduce the distortion.

When the signal runs through a VCR, there is no picture on the TV.

1. Check your TV/VCR input channel setting.
2. If your TV and VCR are connected to an AV Amplifier, please check the input/output selection.

I have set up AVerKey500 Pro and checked all the connections as specified in the manual, but I can only get a picture on the VGA monitor, not on the TV screen.

AVerKey500 Pro is in "Ready" mode once power is connected. You need to switch **AVerKey500 Pro** "ON", either from the Remote Control or Touch-Button Panel Control to display both VGA and VIDEO.

While using the remote control or wired mouse, the PC does not respond. (The mouse cursor does not appear on-screen; the mouse cursor won't move.)

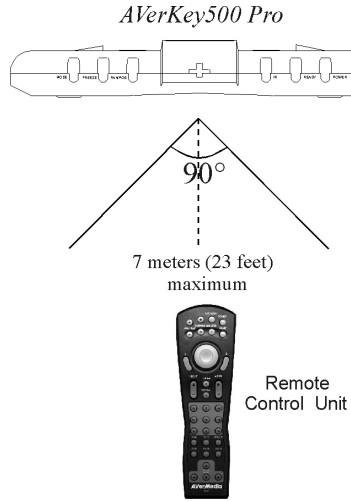
1. Make sure that power is connected. Check and see if the **READY** LED on the **AVerKey500 Pro** front panel is on.
2. Check if the RS-232 cable is securely connected to the **AVerKey500 Pro** "**PC/ADB**" port.
3. Make sure that the mouse driver has been invoked successfully.
4. If you are using a wired mouse, **AVerKey500 Pro** can support the standard (two-button) MS mouse.
5. If you're using the remote control unit, make sure that the batteries have enough power.

The remote control is not performing well enough.

This may happen when the **AVerKey500 Pro** is not getting a good reception from the remote.

To get a good reception :

1. The distance between the remote and **AVerKey500 Pro** must not exceed 7 meters (23 feet).
2. The remote control must be within a 90° angle with the **AVerKey500 Pro** infrared sensor (see the figure below).



The mouse driver I'm using cannot work with AVerKey500 Pro.

Basically, **AVerKey500 Pro** can be used with any mouse driver. But since different driver programs support different types of mouse devices, functions or settings, incompatibility problems may occur. To avoid such problems, we strongly suggest you use a mouse driver that is from a world-known mouse supplier.

Appendix

Supported Display Modes

The **AVerKey500 Pro** should in theory support any computer and display system with Vertical frequencies of 50Hz to 100Hz and Horizontal frequencies of 24kHz to 95KHz.

PC	Vertical Frequency
640x480	60Hz, 72Hz 75Hz, 85Hz 90Hz, 100Hz
800x600	56Hz, 60Hz 72Hz, 75Hz 85Hz, 90Hz 100Hz
1024x768	60Hz, 70Hz 75Hz
1280x1024	60Hz, 75Hz 80Hz
1600x1200	60Hz, 75Hz
MAC	
512x384	60Hz
640x480	67Hz
862x624	75Hz
1024x768	75Hz

LIMITED WARRANTY

AVerMedia TECHNOLOGIES, Inc. warrants this product to be free of defects resulting from faulty manufacture or components under the following terms :

WARRANTY LENGTH

Labor is warranted for (1) one year from the date of purchase.

Parts are warranted for (1) one year from the date of purchase.

Replacement products will be warranted for the remainder of the one year warranty period or (30) thirty days, whichever is longer.

WHO IS PROTECTED

This warranty is enforceable only by the first consumer purchaser.

WHAT IS AND IS NOT COVERED

Except as specified below, this warranty covers all defects resulting from faulty manufacturing of this product. The following are not covered by the warranty.

1. Any product on which the serial number has been defaced, modified, or removed.
2. Damage, deterioration, or malfunction resulting from :
   A. Accident, abuse, misuse, neglect, fire, water, lightning, or other acts of nature, commercial or industrial use, unauthorized product modification, or failure to follow instructions included with the product.
   B. Misapplication of service by someone other than the manufacturer's representative.
   C. Any shipment damages. (Claims must be made with carrier.)
   D. Any other cause which does not relate to a product defect.
3. Cartons, cases, batteries, cabinets, tapes, or accessories used with product.
4. AVerMedia does not warrant that this product will meet your requirements; it is your responsibility to determine the suitability of this product for your purpose.

WHAT WE WILL AND WILL NOT PAY FOR

We will pay labor and material expenses for covered items. However, we will not pay for the following :

1. Removal or installation charges.
2. Shipping charges.
3. Any incidental charges.

EXCLUSION OF DAMAGES

The manufacturer's sole obligation and liability under this warranty is limited to the repair or replacement of a defective product at our option. The manufacturer shall not, in any event, be liable to the purchaser or any third party for any incidental or consequential damage (including, but not limited to, damages resulting from interruption of service and loss of business) or liability in tort relating to this product or resulting from its use or possession.

LIMITATIONS OF IMPLIED WARRANTIES

There are no other oral or written warranties, expressed or implied, including but not limited to those of merchantability or fitness for a particualr purpose. Any implied warranties are limited in duration to one year from the date of purchase.

STATE LAW AND YOUR WARRANTY

This warranty gives you specific legal rights, and you may also have other rights granted under state law. These rights vary from state to state.

CONTACT INFORMATION

Please visit AVerMedia's web site for contact information.

United States : www.aver.com

Taiwan & International : www.avermedia.com